

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-3, 5-16 and 42, amend claims 4, 17 and 37, and add claims 43-61, such that the status of the claims is as follows:

1. (Canceled)

2. (Canceled)

3. (Canceled)

4. (Currently Amended) A filament cassette for supplying filament to a modeling machine that builds three-dimensional objects by extruding modeling material supplied in the form of a filament and made flowable when heated, comprising:

a dried chamber containing a rotatable spool of coiled filament;

a filament path leading from the chamber to an exit orifice;

means for preventing air flow to the chamber; and

a pair of rollers for advancing a filament strand from the spool along the filament path, said rollers being mounted opposite one another along the filament path so as to grip the filament strand therebetween, wherein each roller in said pair of rollers is passive and one roller in said pair is a follower roller that is accessible to receive an external drive force, and ~~The filament cassette of claim 3,~~ wherein the follower roller has a floating axis of rotation in a direction perpendicular to the filament path, allowing the follower roller to move away from the filament path in the absence of an external applied force, thereby relieving pressure on a filament strand in the filament path.

5.-16. (Canceled)

17. (Currently Amended) A filament cassette for supplying filament to a modeling machine that builds three-dimensional objects by extruding modeling material supplied in the form of a filament and made flowable when heated, comprising:

a dried chamber containing a rotatable spool of coiled modeling filament;

a filament path leading from the chamber to an exit orifice;

a means for advancing a filament strand from the spool along the filament path;

means for preventing air flow to the chamber; and

The filament cassette of claim 1, and further comprising:

a registration means for mating with a modeling machine so as to align the exit orifice with a filament conduit of the modeling machine.

18.- 36. (Canceled)

37. (Currently Amended) A method for assembling ~~the~~ a filament cassette of claim 1, comprising the steps of:

providing a cassette having a chamber for receiving a spool of coiled filament, a filament path leading from the chamber to an exit orifice, and a roller for advancing a filament strand from the spool along the filament path, said roller being positioned along the filament path so as to grip the filament strand, wherein said roller is accessible to receive an external drive force, and wherein said roller has a floating axis of rotation which allows the roller to move away from the filament path in the absence of an external applied force, to thereby relieve pressure on a filament strand in the filament path;

loading ~~the~~ a spool of coiled filament into the chamber of the cassette;

positioning a strand of the filament in the filament path;

drying the chamber and the filament; and

sealing the chamber after the filament is loaded.

38. **(Original)** The method of claim 37, wherein the drying step comprises placing a supply of desiccant in the chamber.

39. **(Previously Presented)** The method of claim 37, wherein the drying step comprises heating the filament cassette in an oven under vacuum conditions after the filament is loaded into the chamber and before performing the step of sealing.

40. **(Original)** The method of claim 37, wherein the filament is formed of a high-temperature thermoplastic.

41. **(Previously Presented)** The method of claim 37, wherein the filament is dried to a water content of less than 700 parts per million.

42. **(Canceled)**

43. **(New)** A filament cassette comprising:
a chamber containing a rotatable spool of coiled filament;
a filament path leading from the chamber to an exit orifice; and
a pair of rollers for advancing a filament strand from the spool along the filament path, said rollers being mounted opposite one another along the filament path so as to grip the filament strand therebetween, wherein each roller in said pair of rollers is passive and one roller in said pair is a follower roller that is accessible to receive an external drive force, and wherein the follower roller has a floating axis of rotation which allows the follower roller to move away from the filament path in the absence of an external applied force, thereby relieving pressure on a filament strand in the filament path.

44. (New) The filament cassette of claim 43, and further comprising:
means for preventing air flow to the chamber.
45. (New) The filament cassette of claim 44, wherein the chamber and the coiled filament are dried to a water content of less than 700 parts per million.
46. (New) The filament cassette of claim 44, wherein the means for preventing air flow comprises:
a door through which the follower roller is accessed.
47. (New) The filament cassette of claim 44, and further comprising:
a supply of desiccant inside of the chamber.
48. (New) A filament cassette comprising:
a chamber containing a rotatable spool of coiled filament;
a filament path leading from the chamber to an exit orifice; and
a roller for advancing a filament strand from the spool along the filament path, said roller being positioned along the filament path so as to grip the filament strand, wherein said roller is accessible to receive an external drive force, and wherein said roller has a floating axis of rotation which allows the roller to move away from the filament path in the absence of an external applied force, thereby relieving pressure on a filament strand in the filament path.
49. (New) The filament cassette of claim 48, and further comprising:
means for preventing air flow to the chamber.

50. (New) The filament cassette of claim 49, wherein the chamber and the coiled filament are dried to a water content of less than 700 parts per million.
51. (New) The filament cassette of claim 49, wherein the means for preventing air flow comprises:
a door through which the roller is accessed.
52. (New) The filament cassette of claim 49, and further comprising:
a supply of desiccant inside of the chamber.
53. (New) A filament cassette for supplying filament to a modeling machine, comprising:
a chamber containing a rotatable spool of coiled modeling filament;
a filament path leading from the chamber to an exit orifice;
a means for advancing a filament strand from the spool along the filament path; and
a means for mating with a modeling machine so as to align the exit orifice with a
filament conduit of the modeling machine.
54. (New) The filament cassette of claim 53, and further comprising:
means for preventing air flow to the chamber.
55. (New) The filament cassette of claim 53, wherein the means for preventing air flow comprises:
a door through which the follower roller is accessed.
56. (New) A method for assembling a filament cassette, comprising the steps of:
providing a cassette having a chamber for receiving a spool of coiled filament, a
filament path leading from the chamber to an exit orifice, a means for

advancing a filament strand from the spool along the filament path, and a means for mating with a modeling machine so as to align the exit orifice with a filament conduit of the modeling machine;
loading a spool of coiled modeling filament into the chamber of the cassette;
drying the chamber and the filament; and
sealing the chamber after the filament is loaded.

57. (New) The method of claim 56, wherein the drying step comprises placing a supply of desiccant in the chamber.

58. (New) The method of claim 56, wherein the drying step comprises heating the filament cassette in an oven under vacuum conditions after the filament is loaded into the chamber and before performing the step of sealing.

59. (New) The method of claim 56, wherein the filament is formed of a high-temperature thermoplastic.

60. (New) The method of claim 56, wherein the filament is dried to a water content of less than 700 parts per million.

61. (New) The method of claim 56, and further comprising the step of positioning a strand of the filament in the filament path, in operable association with the means for advancing.